

## WHAT IS CLAIMED IS:

- 1     1.     A control unit for electric power steering, comprising:  
2             motor driving means for energizing an electric motor to operate a steering  
3     mechanism secondarily;  
4             motor current detecting means for detecting a current flowing in said  
5     electric motor;  
6             control means for implementing control so that a current detection output  
7     obtained by said motor current detecting means reaches a target current value to  
8     said motor driving means determined on the basis of a steering torque in said  
9     steering mechanism;  
10            temperature detecting means for detecting a temperature of said motor  
11     current detecting means; and  
12            correction means for correcting an output of said motor current detecting  
13     means on the basis of an output of said temperature detecting means.
  
- 1     2.     The unit according to claim 1, further comprising characteristic data  
2     storing means for storing output characteristic data on said motor current  
3     detecting means with respect to the output of said temperature detecting means,  
4     said correction means correcting the output of said motor current detecting means  
5     on the basis of the output of said temperature detecting means and said output  
6     characteristic data on said motor current detecting means stored in said  
7     characteristic data storing means.
  
- 1     3.     The unit according to claim 2, wherein said characteristic data storing  
2     means stores characteristic data obtained on the basis of the outputs of said motor  
3     current detecting means with respect to the outputs of said temperature detecting  
4     means under two or more temperature conditions.

- 1 4. The unit according to claim 2, wherein said characteristic data storing  
2 means is constructed with a data-rewritable non-volatile memory.
- 1 5. The unit according to claim 1, wherein said motor current detecting means  
2 and said temperature detecting means are arranged on the same semiconductor.
- 1 6. The unit according to claim 1, wherein said temperature detecting means is  
2 placed in the vicinity of said motor current detecting means.
- 1 7. The unit according to claim 5, wherein, on said semiconductor, said  
2 temperature detecting means is located in the close vicinity of said motor current  
3 detecting means.